LFM 22 evaluates the response from ATP server 14 according to the business constraints that are specified in the changed component ATP request 32. Processing requirements for LFM 22 at this stage may be identical to those with respect to a new component ATP request 32. For cancellations, LFM 22 may update the status of any

5   locally maintained component ATP request 32 or component quotation 34 as "canceled." LFM 22 receives the component quotation response from ATP server 14 and sends the constraint-compliant responses to fulfillment server 16 in the form of a new component quotation 34. Descriptive or other failure notifications may be created in the manner described above. If necessary, cancellation confirmations are

10   also created and sent to fulfillment server 16.

Process Component Quotations [Fulfillment Server]

When fulfillment server 16 has processed and sent the changed component ATP requests 32 to LFMs, it monitors completion of the resulting component

15   quotations 34. In one embodiment, quotation 36 is deemed complete when each originating changed component ATP request 30 has received one or more component quotations 34, failure notifications, or cancellation confirmations, as the case may be. Fulfillment server 16 may update the status of any ATP request 30 and quotation 36 maintained at fulfillment server 16 based on any cancellation confirmations received

20   from LFMs 22.

Once component quotation 34 have been received and quotation 36 is deemed complete, fulfillment server 16 re-evaluates the overall quotation 36 according to the business constraints specified in the originating changed ATP request 30. Processing is identical to that of a quotation 36 for a new ATP request 30. Quotation pricing may

25   be re-calculated from scratch or otherwise in light of the existing confirmed prices with the newly quoted items. When fulfillment server 16 has evaluated quotation 36 relative to the specified ATP request constraints, a unified quotation 36 is presented to client 12. This process is similar to that of a new quotation 36, except that the original quotation 36 already exists and thus fulfillment server 16 only updates

30   portions of quotation 36 associated with the changed ATP request 30. Failure notifications and cancellation confirmations may be generated and sent to client 12 as appropriate. Subsequent user confirmation processing may be accomplished on a net

change basis and may reflect processing described above with respect to the quotation confirmation and promise acceptance workflows.

Re-Quote Workflow

5   In one embodiment, client 12 or an associated user is able to re-quote an existing ATP request 30 at any point before total or partial order cancellation or fulfillment. This capability does not affect any existing promise 46, but simply results in a new quotation 36. Client 12 or an associated user must accept new quotation 36 to obviate existing promise 46. Thus, all processing is substantially the same as for 10   the initial ATP request 30, except for the treatment of the data objects. Client 12 or an associated user queries the original ATP request 30 to initiate this processing. Once ATP request 30 has been displayed through inquiry, the user may then select an appropriate re-quote function and client 12 executes the re-quote command.

15   ### Queue ATP Request Workflow

Fulfillment server 16 may support intelligent queuing of requests, which may be configurable according to a user, customer, or other profile, information received from client 12 or an associated user, or information received from a system administrator or function. Request queue parameters may specify the conditions 20   under which queuing is to occur, the duration of the queuing, and the frequency with which requests are re-submitted. Since any change throughout the distributed LFMs 22 and ATP servers 14 may allow a queued request to get a satisfactory promise, such changes should be sent to one or more fulfillment server servers 16. Each fulfillment server 16 can reconsider its queued requests in view of the changes, possibly initiating 25   an appropriate quotation or promising workflow. Queuing of ATP requests 30 is described more fully in U.S. Application Nos. 08/491,167 and 08/802,434.

Initiate ATP Request Queue [Client]

In one embodiment, client 12 or an associated user may queue an existing 30   ATP request 30 at any point before total or partial order cancellation or fulfillment. Queued ATP requests 30 are periodically submitted for re-quoting with the intent of improving the quotation result. Similar to the re-quote transaction described above,

the queuing process does not effect any existing promise 46, but simply results in a new quotation 36. Client 12 or an associated user may execute a queue function to initiate queue processing after the unsatisfactory result of an initial ATP request 30 or after querying an existing ATP request 30. Queuing behavior may be limited

5   according to specified parameters concerning re-try intervals, maximum number of tries, and the like.

Process ATP Request Queue [Fulfillment Server]

Fulfillment server 16 receives the request queue instruction as a confirmation

10   indicating that all request line-items have been queued. Based on this confirmation, fulfillment server 16 updates the status of each request line-item to "queued." Further processing of ATP request 30 suspends until queuing parameters for such processing have been met. Based on a specified re-try interval or otherwise, fulfillment server 16 may periodically re-submit the queued component ATP requests 32 to LFMs 22 for

15   quotation. At this point, the processing is identical to that of the Process Re-Quote workflow discussed above.

Component Promise Changes Workflow

FIGURE 5 illustrates a component promise changes workflow. This or a

20   similar workflow may be used to handle modification of any appropriate existing quantity, acceptance, promise, quotation, request, or supply. It is common for the supply supporting backlogged component ATP requests 32 to fluctuate over time. Some types of changes are infrequent, but others are common and must be handled efficiently. As an example, planned supply often changes on a regular basis, usually

25   at least weekly, often daily, sometimes more frequently. Furthermore, supply allocations to various products or sellers, as described in co-pending U.S. Application Nos. 08/491,167 and 08/802,434, typically change at least as frequently. In both cases, all affected elements within distributed system 10 should be notified and any pending quotations 36 or promises 46 may need to be adjusted or marked stale.

30   The impact of changes in production plans and schedules is likely to propagate downstream to component ATP requests 32 at LFMs 22 and/or ATP servers 14, causing one or more existing commitments to be invalidated. The end result might be